

REMARKS

Claims 1-4, 9-10, 15 and 17 have been previously canceled; no claims are currently canceled. Claims 5, 8, 11 and 14 have been amended by way of this response. No new claims have been added. Thus, claims 5-8, 11-14 and 16 are currently pending and presented for examination. Applicant respectfully requests reconsideration and allowance of the pending claims in view of the amendments and the remarks.

Response to Rejections under 35 U.S.C. 112:

Claims 5, 8, 11 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicant has amended claims 5, 8, 11 and 14 according to the Examiner's remarks and therefore respectfully requests the Examiner to withdraw the rejections. No new matter has been added.

Response to Rejections under 35 U.S.C. 102:

Claims 5-8, 11-14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodson et al. (US 6,942,018 B2). Applicant respectfully disagrees.

Independent claims 5 and 11 recite:

“... wherein an entry parameter of a fluid involved in a heat exchange of the micro heat exchanger is unchanged.”

Applicant's invention teaches that an entry parameter of a fluid in a heat exchange of the micro heat exchanger is unchanged. The temperature of a wall of the micro heat exchanger with unchanged parameters of the fluid (which means with a constant mass flow and a constant fluid temperature) is a measure for the efficiency of the heat exchanger. On the outside of the micro heat exchanger is a temperature sensor arranged measuring the temperature on the micro heat exchanger wall and being connected to an evaluation unit. The sensor detects a reduced efficiency of the heat exchanger when the measured temperature changes based upon constant mass flow and constant fluid entry parameter.

In contrast, Goodson et al. describes removal of heat from heat generating devices. A micro heat exchanger is attached to a heat producing device. Temperature sensors are disposed on various locations of the micro heat exchanger supplying signals indicative of the temperature of that specific region of the micro heat exchanger to a controller via signal lines. These temperatures are used to maintain optimum temperature control (Goodson et al., col. 15, lines 49-57). Goodson et al. fails to disclose or suggest a constant entry parameter of a fluid involved in a heat exchange. Goodson's et al. object of the invention is to remove heat from heat generating devices, but not diagnosing an obstruction in a channel of the micro heat exchanger. Thus, a constant entry parameter of a fluid involved in the heat exchange is not necessary.

In view of the above, independent claims 5 and 11 are patentable. Furthermore, dependent claims 6-8, which depend on claim 5, and dependent claims 12-14 and 16, which depend on claim 11, are also patentable at least based on their dependence from claim 5 or 11 as well as based on their own merits. Therefore, Applicant respectfully requests the Examiner to withdraw the rejections.

Conclusion

For the foregoing reasons, it is respectfully submitted that the objections and rejections set forth in the outstanding Office Action are inapplicable to the present claims. Please grant any extensions of time required to enter this paper. The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper, including fees for additional claims and terminal disclaimer fee, or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

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By: 

Ye Ren
Registration No. 62,344
(407) 736-6844

Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, New Jersey 08830